

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST  
CERTIFICATES FOR ELECTRICAL EQUIPMENT  
(IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE  
CERTIFICATS D ESSAIS DES EQUIPEMENTS  
ELECTRIQUES (IECEE) METHODE OC

## CB TEST CERTIFICATE

## CERTIFICAT D'ESSAI OC

Product  
Produit

LCD MONITOR

Name and address of the applicant  
Nom et adresse du demandeur

TPV Electronics (Fujian) Co., Ltd.  
Shangzheng, Yuan Hong Road  
Fuqing City, Fujian Province, P.R. China

Name and address of the manufacturer  
Nom et adresse du fabricant

TPV Electronics (Fujian) Co., Ltd.  
Shangzheng, Yuan Hong Road  
Fuqing City, Fujian Province, P.R. China

Name and address of the factory  
Nom et adresse de l'usine

See additional page(s)

Ratings and principal characteristics  
Valeurs nominales et caractéristiques principales

DC 19V; 1.31A or 2A; Class III

Trademark (if any)  
Marque de fabrique (si elle existe)

AOC

Type of Manufacturer's Testing Laboratories used  
Type de programme du laboratoire d'essais constructeur

CTF Stage 1

Model / Type Ref.  
Ref. de type

refer to the test report.

Additional information (if necessary may also be  
reported on page 2)  
Les informations complémentaires (si nécessaire,  
peuvent être indiqués sur la 2<sup>ème</sup> page)

For model differences, refer to the test report.  
Re-issue of JPTUV-061413 dated 06.02.2014,  
due to first modification.

A sample of the product was tested and found  
to be in conformity with  
Un échantillon de ce produit a été essayé et a été  
considéré conforme à la

IEC 60950-1:2005 + A1 + A2  
National differences see test report

As shown in the Test Report Ref. No. which forms part  
of this Certificate  
Comme indiqué dans le Rapport d'essais numéro de  
référence qui constitue partie de ce Certificat

17043285 002

This CB Test Certificate is issued by the National Certification Body  
Ce Certificat d'essai OC est établi par l'Organisme National de Certification



TÜV Rheinland Japan Ltd.  
Global Technology Assessment Center  
4-25-2 Kita-Yamata, Tsuzuki-ku  
Yokohama 224-0021 Japan  
Phone + 81 45 914-3888  
Fax + 81 45 914-3354  
Mail: info@jpn.tuv.com  
Web: www.tuv.com

Date: 23.06.2015

Signature:

Dipl.-Ing. (FH) C. Nasca

1. TPV Display Technology (Wuhan) Co., Ltd.  
Unique No. 11, Zhuankou Development District of Economic Technological Development Zone, Wuhan City 430056, P.R. China
2. TPV Electronics (Fujian) Co., Ltd.  
Shangzheng, Yuan Hong Road  
Fuqing City, Fujian Province  
P.R. China
3. Envision Industry of Electronic Products Ltd.  
Rodovia Anhanguera S/N-KM 49  
Tijuco Preto-Jundiaí-SP-  
13.205-700, Brazil
4. L&T Display Technology (Fujian) Ltd.  
Optoelectronic Park, Rongqiao Economic and Technological Development Zone  
Fuqing, Fujian 350301, P.R. China
5. TPV Electronics (Fujian) Co., Ltd.  
Rongqiao Economic and Technological Development Zone  
Fuqing City, Fujian Province  
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6. Trend Smart CE Mexico S de RL de CV  
Avenida Sor Juana Ines de la Cruz de 19602 Nueva Tijuana,  
22435 Tijuana Baja California  
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7. TPV Display Technology (Beihai) Co., Ltd.  
China Electronic Beihai Industry Park, Northeast of the Crossing  
Between Taiwan Road and Jilin Road, Beihai City, Guangxi, P.R. China
8. TPV Technology (Qingdao) Co., Ltd.  
No.99 Huoju Road, High-tech Industrial Development Zone  
Qingdao City, Shandong Province, P.R. China
9. TPV Display Technology (China) Co., Ltd.  
No. 106 Jinghai 3 Rd., BDA  
Beijing City 100176  
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**Additional information (if necessary)**  
**Information complémentaire (si nécessaire)**

Report Ref. No.: 17043285 002

Date: 23.06.2015

Signature:



Dipl.-Ing. (FH) C. Nasca

10. Hefei Huntkey Display Technology  
Co., Ltd.  
South Jinxiu Road, East Qingtan Road  
Economic And Technological  
Development Zone, Hefei, Anhui 230601, P.R. China

**Additional information (if necessary)**  
**Information complémentaire (si nécessaire)**

Report Ref. No.: 17043285 002

Date: 23.06.2015

Signature:




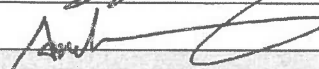
Dipl.-Ing. (FH) C. Nasca



Test Report issued under the responsibility of:



<b>TEST REPORT</b>	
<b>IEC 60950-1</b>	
<b>Information technology equipment – Safety – Part 1: General requirements</b>	
<b>Report Number</b> .....	17043285 002
<b>Date of issue</b> .....	Jun. 12, 2015
<b>Total number of pages</b> .....	13 pages
<b>Applicant's name</b> .....	TPV Electronics (Fujian) Co., Ltd.
<b>Address</b> .....	Shangzheng, Yuan Hong Road, Fuqing City, Fujian Province, P.R. China
<b>Test specification:</b>	
<b>Standard</b> .....	IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013
<b>Test procedure</b> .....	CB Scheme
<b>Non-standard test method</b> .....	N/A
<b>Test Report Form No</b> .....	IEC60950_1F
<b>Test Report Form(s) Originator</b> .....	SGS Fimko Ltd
<b>Master TRF</b> .....	Dated 2014-02
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If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.	
<b>This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.</b>	
<b>General disclaimer:</b>	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.	

Test item description..... :		LCD MONITOR	
Trade Mark..... :		AOC	
Manufacturer..... :		Same as applicant.	
Model/Type reference..... :		1) 215LM000**, *2279****, **2281****; 2) 230LM000**, *2379****, **2381****, *2380****; 3) 238LM000**, **2481**** (* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure color and sales regions for marketing purpose only, no technical difference.)	
Ratings..... :		I/P: 19Vdc, 1.31A or 2A	
<b>Testing procedure and testing location:</b>			
<input checked="" type="checkbox"/>	<b>CB Testing Laboratory:</b>	TÜV Rheinland (Shenzhen) Co., Ltd.	
Testing location/ address .....		TMP/CTF Stage 1 procedure used. For address of testing location see "Testing procedure: TMP/CTF Stage 1" below	
<input type="checkbox"/>	<b>Associated CB Testing Laboratory:</b>	N/A	
Testing location/ address .....		N/A	
Tested by (name + signature)..... :			
Approved by (name + signature)..... :			
<input checked="" type="checkbox"/>	<b>Testing procedure: TMP/CTF Stage 1:</b>	See below	
Testing location/ address .....		TPV Electronics (Fujian) Co., Ltd. Shangzheng, Yuan Hong Road, Fuqing City, Fujian Province, P.R. China	
Tested by (name + signature)..... :		Steven Lin	
Approved by (name + signature)..... :		Anderson Wang	
<input type="checkbox"/>	<b>Testing procedure: WMT/CTF Stage 2:</b>	N/A	
Testing location/ address .....		N/A	
Tested by (name + signature)..... :			
Witnessed by (name + signature)..... :			
Approved by (name + signature)..... :			
<input type="checkbox"/>	<b>Testing procedure: SMT/CTF Stage 3 or 4:</b>	N/A	
Testing location/ address .....		N/A	
Tested by (name + signature)..... :			
Witnessed by (name + signature)..... :			
Approved by (name + signature)..... :			
Supervised by (name + signature)..... :			

**List of Attachments (including a total number of pages in each attachment):**

- Photo documentation

Total number of pages in each attachment is indicated in individual attachment.

**Summary of testing:**

**Tests performed (name of test and test clause):**

name of test	test clause number
Input current Test	1.6.2
SELV limits for normal conditions	2.2.2
Stability test	4.1
Maximum Temperature Test	4.5.2
Fault Condition Test	5.3

The EUT passed the test.

**Testing location:**

All tests as described in Test Case and Measurement Sections were performed at the laboratory described on page 2.

**Summary of compliance with National Differences**

See original CB report 17043285 001 for details.

**Copy of marking plate**

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

**AOC LCD monitor (LED Backlight)**  
 Product Name/Nama Produk: 2281FW  
 Model No. 215LM00059  
 Power Rating/Tegangan: 19V=1.31A  
 www.aoc.com Made in China  
 Warning: Shock Hazard, Do Not Open. Pour éviter une électrocution, ne retirez pas le couvercle!

AOC International Europe B.V. Amstelgebouw, 6th floor Prins Bernhardplein 200 1097 JB Amsterdam The Netherlands  
 Envision Peripherals, Inc. 47490 Seabridge Drive Fremont, CA 94538 USA

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.  
 CAN ICES-3(B)/NMB-3(B)

For applicable power supplies see user manual. Voir le manuel d'utilisateur pour les courants d'alimentation applicable.

**AOC LCD monitor (LED Backlight)**  
 Product Name/Nama Produk: 2281FWH  
 Model No. 215LM00059  
 Power Rating/Tegangan: 19V=1.31A  
 www.aoc.com Made in China  
 Warning: Shock Hazard, Do Not Open. Pour éviter une électrocution, ne retirez pas le couvercle!

AOC International Europe B.V. Amstelgebouw, 6th floor Prins Bernhardplein 200 1097 JB Amsterdam The Netherlands  
 Envision Peripherals, Inc. 47490 Seabridge Drive Fremont, CA 94538 USA

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.  
 CAN ICES-3(B)/NMB-3(B)

For applicable power supplies see user manual. Voir le manuel d'utilisateur pour les courants d'alimentation applicable.

<p><b>AOC</b> LCD monitor (LED Backlight)                  Product Name/Nama Produk: I2381F                  Model No. 230LM00031                  Power Rating/Tegangan: 19V—1.31A                  www.aoc.com Made in China                  Warning: Shock Hazard, Do Not Open.                  Pour éviter une électrocution,                  ne retirez pas le couvercle!</p>	<p>This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.                  CAN ICES-3(B)/NMB-3(B)</p> <p>AOC International Europe B.V.                  Amstelgebouw, 6th floor                  Prins Bernhardplein 200                  1097 JB Amsterdam                  The Netherlands</p> <p>Envision Peripherals, Inc.                  47490 Seabridge Drive                  Fremont, CA 94538                  USA</p> <p>For applicable power supplies see user manual.                  Voir le manuel d'utilisateur pour les courants d'alimentation applicable.</p>	
<p><b>AOC</b> LCD monitor (LED Backlight)                  Product Name/Nama Produk: I2381FH                  Model No. 230LM00031                  Power Rating/Tegangan: 19V—1.31A                  www.aoc.com Made in China                  Warning: Shock Hazard, Do Not Open.                  Pour éviter une électrocution,                  ne retirez pas le couvercle!</p>	<p>This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.                  CAN ICES-3(B)/NMB-3(B)</p> <p>AOC International Europe B.V.                  Amstelgebouw, 6th floor                  Prins Bernhardplein 200                  1097 JB Amsterdam                  The Netherlands</p> <p>Envision Peripherals, Inc.                  47490 Seabridge Drive                  Fremont, CA 94538                  USA</p> <p>For applicable power supplies see user manual.                  Voir le manuel d'utilisateur pour les courants d'alimentation applicable.</p>	
<p><b>AOC</b> LCD monitor (LED Backlight)                  Product Name/Nama Produk: I2281FX                  Model No. 238LM00007                  Power Rating/Tegangan: 19V—1.31A                  www.aoc.com Made in China                  Warning: Shock Hazard, Do Not Open.                  Pour éviter une électrocution,                  ne retirez pas le couvercle!</p>	<p>This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.                  CAN ICES-3(B)/NMB-3(B)</p> <p>AOC International Europe B.V.                  Amstelgebouw, 6th floor                  Prins Bernhardplein 200                  1097 JB Amsterdam                  The Netherlands</p> <p>Envision Peripherals, Inc.                  47490 Seabridge Drive                  Fremont, CA 94538                  USA</p> <p>For applicable power supplies see user manual.                  Voir le manuel d'utilisateur pour les courants d'alimentation applicable.</p>	
<p><b>AOC</b> LCD monitor (LED Backlight)                  Product Name/Nama Produk: I2481FXH                  Model No. 238LM00007                  Power Rating/Tegangan: 19V—1.31A                  www.aoc.com Made in China                  Warning: Shock Hazard, Do Not Open.                  Pour éviter une électrocution,                  ne retirez pas le couvercle!</p>	<p>This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.                  CAN ICES-3(B)/NMB-3(B)</p> <p>AOC International Europe B.V.                  Amstelgebouw, 6th floor                  Prins Bernhardplein 200                  1097 JB Amsterdam                  The Netherlands</p> <p>Envision Peripherals, Inc.                  47490 Seabridge Drive                  Fremont, CA 94538                  USA</p> <p>For applicable power supplies see user manual.                  Voir le manuel d'utilisateur pour les courants d'alimentation applicable.</p>	
<p><b>AOC</b> LCD monitor (LED Backlight)                  Product Name/Nama Produk: I2380SD                  Model No. 230LM00032                  Power Rating/Tegangan: 19V—1.31A                  www.aoc.com Made in China                  Warning: Shock Hazard, Do Not Open.                  Pour éviter une électrocution,                  ne retirez pas le couvercle!</p>	<p>This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.                  CAN ICES-3(B)/NMB-3(B)</p> <p>AOC International Europe B.V.                  Amstelgebouw, 6th floor                  Prins Bernhardplein 200                  1097 JB Amsterdam                  The Netherlands</p> <p>Envision Peripherals, Inc.                  47490 Seabridge Drive                  Fremont, CA 94538                  USA</p> <p>For applicable power supplies see user manual.                  Voir le manuel d'utilisateur pour les courants d'alimentation applicable.</p>	

Note: The above labels represent label for model name other than above covered by the model name. See original CB report 17043285 001 for other rating label.

<b>Test item particulars .....</b> :	
<b>Equipment mobility .....</b>	<input checked="" type="checkbox"/> movable <input type="checkbox"/> hand-held <input type="checkbox"/> transportable <input type="checkbox"/> stationary <input type="checkbox"/> for building-in <input type="checkbox"/> direct plug-in
<b>Connection to the mains .....</b>	<input type="checkbox"/> pluggable equipment <input type="checkbox"/> type A <input type="checkbox"/> type B <input type="checkbox"/> permanent connection <input type="checkbox"/> detachable power supply cord <input type="checkbox"/> non-detachable power supply cord <input checked="" type="checkbox"/> not directly connected to the mains
<b>Operating condition .....</b>	<input checked="" type="checkbox"/> continuous <input type="checkbox"/> rated operating / resting time:
<b>Access location .....</b>	<input checked="" type="checkbox"/> operator accessible <input type="checkbox"/> restricted access location
<b>Over voltage category (OVC) .....</b>	<input type="checkbox"/> OVC I <input checked="" type="checkbox"/> OVC II <input type="checkbox"/> OVC III <input type="checkbox"/> OVC IV <input checked="" type="checkbox"/> other: not directly connected to the mains.
<b>Mains supply tolerance (%) or absolute mains supply values .....</b>	N/A
<b>Tested for IT power systems .....</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>IT testing, phase-phase voltage (V) .....</b> :	
<b>Class of equipment .....</b>	<input type="checkbox"/> Class I <input type="checkbox"/> Class II <input checked="" type="checkbox"/> Class III <input type="checkbox"/> Not classified
<b>Considered current rating of protective device as part of the building installation (A) .....</b>	16A (20A for North America)
<b>Pollution degree (PD) .....</b>	<input type="checkbox"/> PD 1 <input checked="" type="checkbox"/> PD 2 <input type="checkbox"/> PD 3
<b>IP protection class .....</b>	IP20
<b>Altitude during operation (m) .....</b>	≤5000
<b>Altitude of test laboratory (m) .....</b>	<2000
<b>Mass of equipment (kg) .....</b>	Models 215LM000**, *2279*****, 230LM000**, *2379*****. approx. 3.97kg (base type A: 0.93kg); Models **2281***** approx. 2.66kg with base type B; Models **2381*****, *2380***** approx. 2.98kg with base type B; Models **2481*****, 238LM000** approx. 3.06kg with base type B (base type B: 0.45kg)
<b>Possible test case verdicts:</b>	
- test case does not apply to the test object.....: N/A	
- test object does meet the requirement .....	
- test object does not meet the requirement .....	
<b>Testing .....</b> :	
<b>Date of receipt of test item .....</b>	May 27, 2015
<b>Date(s) of performance of tests .....</b>	May 27, 2015 to Jun. 12, 2015
<b>General remarks:</b>	
"(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report.	
Throughout this report a <input type="checkbox"/> comma / <input checked="" type="checkbox"/> point is used as the decimal separator.	



**Manufacturer's Declaration per sub-clause 4.2.5 of IECCE 02:**

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided ..... :  **Yes**  
 **Not applicable**

**When differences exist; they shall be identified in the General product information section.**

**Name and address of factory (ies) .....** : See original CB report 17043285 001 for details.

**General product information:**

Description of change(s):

1. Add new models: **\*\*2281\*\*\*\*\***, **\*\*2381\*\*\*\*\***, **\*2380\*\*\*\*\***, **\*\*2481\*\*\*\*\*** which are identical to original model 215LM000\*\* except:
  - 1> Add alternative panel LM238WF\* for 23.8 inch models 238LM000\*\*, **\*\*2481\*\*\*\*\*** only
  - 2> Add alternative main board 715G7581(with VGA, DVI ports), 715G7580(with VGA, HDMI ports) used only
  - 3> Add alternative base stand type B used only
  - 4> Other differences see table below for differences between the constructions
2. Add alternative plastic enclosure type B used for 21.5 inch models.
3. Add alternative plastic enclosure type B' used for 23 inch models.
4. Add alternative plastic enclosure type B" used for 23.8 inch models.
5. Updated ratings: from I/P: 19Vdc, 1.31A to I/P: 19Vdc, 1.31A or 2A

See below table for differences between the constructions:

Model name	Panel	Plastic enclosure	AC/DC adapter	Base stand	Main board
215LM000** *2279*****	21.5 inch	Type A, <b>Type B</b>	ADPC19XXEX	Type A	715G7379 715G7269
<b>**2281*****</b>				Type B	<b>715G7581</b> <b>715G7580</b>
230LM000** *2379*****	23 inch	Type A', <b>Type B'</b>		Type A	715G7379 715G7269
<b>**2381*****</b> <b>*2380*****</b>				Type B	<b>715G7581</b> <b>715G7580</b>
<b>**2481*****</b> <b>238LM000**</b>	23.8 inch	<b>Type B"</b>			

Remark:

Plastic enclosure type A' is identical to type A except for dimension due to difference panel size.

Plastic enclosure type B', type B" is identical to type B except for dimension due to difference panel size.

For the above described change(s) the following was considered to be necessary:

Change	Testing	Comments
1.	Clause 1.6.2 Input current test Clause 2.2.2 SELV limits for normal condition Clause 4.5.2 Maximum temperature test Clause 5.3 Fault condition test	See copy of marking plate for details. See following pages for test details. See also photo documentation for details.
2-4.	Clause 4.1 Stability test	See following pages for test details. See also photo documentation for details.

Definition of variable(s):

Variable:	Range of variable:	Content:
*	can be 0-9, A-Z, a-z, -, \, /, + or blank	Represent different enclosure color and sales region for marketing purpose. No technical differences.

History of amendments and modifications:

Ref. No.17043285 001, dated Jan. 05, 2015 (Original test report)  
 Ref. No.17043285 002, dated Jun. 12, 2015 (1<sup>st</sup> Modification)

**Abbreviations used in the report:**

- normal conditions	<b>N.C.</b>	- single fault conditions	<b>S.F.C</b>
- functional insulation	<b>OP</b>	- basic insulation	<b>BI</b>
- double insulation	<b>DI</b>	- supplementary insulation	<b>SI</b>
- between parts of opposite polarity	<b>BOP</b>	- reinforced insulation	<b>RI</b>

Indicate used abbreviations (if any)

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
<b>4</b>	<b>PHYSICAL REQUIREMENTS</b>		<b>P</b>
<b>4.1</b>	<b>Stability</b>		<b>P</b>
	Angle of 10°	Test performed by client's request.	<b>P</b>
	Test force (N) .....	Equipment is not a floor standing unit.	<b>N/A</b>

1.5.1	TABLE: list of critical components				<b>P</b>
Object/part no.	Manufacture/ trademark	Type/model	Technical data	standard	Mark(s) of conformity <sup>1)</sup>
LCD Panel for 23.8 inch models	L&T	LM238WF* (* can be 0-9, A-Z or blank for marketing purpose only)	23.8 inch TFT LCD panel with LED backlight, resolution: 1080x1920, power consumption 15.2W (typ.), LED array voltage 54.9V declared in specification.	--	Tested in equipment
Base stand type B	Interchangeable	Interchangeable	Metallic	--	--
Note(s):					
1. An asterisk indicates a mark that assures the agreed level of surveillance.					

1.6.2	TABLE: electrical data (in normal conditions)						<b>P</b>
U (V)	I (A)	Irated (A)	P (W)	Fuse #	Ifuse (A)	Condition/status	
<b>Model **2281** with main board 715G7581, panel M215HG*-L** (CHIMEI INNOLUX)</b>							
VGA mode							
18.89	1.00	1.31	18.89	--	--	Maximum normal load	
DVI mode							
18.88	1.00	1.31	18.88	--	--	Maximum normal load	
<b>Model **2281** with main board 715G7580, panel M215HG*-L** (CHIMEI INNOLUX)</b>							
VGA mode							
18.88	1.02	1.31	19.26	--	--	Maximum normal load	
HDMI mode							
18.86	1.02	1.31	19.24	--	--	Maximum normal load	
<b>Model **2381** with main board 715G7581, panel M230HGE-L** (CHIMEI INNOLUX)</b>							
VGA mode							

IEC 60950-1						
Clause	Requirement + Test			Result - Remark		Verdict
18.87	1.01	1.31	19.06	--	--	Maximum normal load
DVI mode						
18.86	1.02	1.31	19.24	--	--	Maximum normal load
<b>Model **2381** with main board 715G7580, panel M230HGE-L** (CHIMEI INNOLUX)</b>						
VGA mode						
18.80	1.09	1.31	20.49	--	--	Maximum normal load
HDMI mode						
18.78	1.09	1.31	20.47	--	--	Maximum normal load
<b>Model **2481** with main board 715G7581, panel LM238WF* (L&amp;T)</b>						
VGA mode						
18.86	0.94	1.31	17.72	--	--	Maximum normal load
DVI mode						
18.82	0.95	1.31	17.88	--	--	Maximum normal load
<b>Model **2481** with main board 715G7580, panel LM238WF* (L&amp;T)</b>						
VGA mode						
18.85	1.01	1.31	19.04	--	--	Maximum normal load
HDMI mode						
18.83	1.02	1.31	19.21	--	--	Maximum normal load

2.2.2	TABLE: Hazardous voltage measurement			P
Component (measured between)	max. voltage (V) (normal operation)		Voltage Limiting Components	
	V peak	V d.c.		
<b>Tested with main board 715G7581 on 23.8 inch models</b>				
Output of converter board for LED backlight CN801 -Earth	--	51.6		
After L801-Earth	--	31.5		
<b>Tested with main board 715G7580 on 23.8 inch models</b>				
Output of converter board for LED backlight CN802 -Earth	--	51.9		
After L801-Earth	--	31.8		
Supplementary information: Input Voltage is 19Vdc.				

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
<b>4.5</b>	<b>TABLE: Thermal requirements</b>		<b>P</b>
	Supply voltage (V) .....	19Vdc	--
	Ambient T <sub>min</sub> (°C) .....	See below	--
	Ambient T <sub>max</sub> (°C) .....	See below	--
Maximum measured temperature T of part/at.....:		T (°C)	Allowed T <sub>max</sub> (°C)
<b>Model **2281** with main board 715G7581, panel M215HG*-L** (CHIMEI INNOLUX)</b>			
	DC inlet body CN701 (on main board)	35.3	--
	PCB near U701 body (on main board)	42.9	--
	PCB near L701 (on main board)	43.4	--
	PCB near C801 (on main board)	42.6	--
	PCB near U801 (on main board)	48.8	--
	PCB near U401 (on main board)	50.8	--
	PCB near U402 (on main board)	47.1	--
	PCB near L801 body (on main board)	46.4	--
	Plastic enclosure inside	31.9	--
	Plastic enclosure outside	28.6	--
	Metal	34.7	--
	panel	35.8	--
	Ambient	25.3	--
<b>Model **2281** with main board 715G7580, panel M215HG*-L** (CHIMEI INNOLUX)</b>			
	DC Inlet body CN701	35.9	--
	PCB near U701 (on main board)	43.9	--
	C801body (on main board)	42.9	--
	L701 body (on main board)	44.2	--
	L801 body (on main board)	47.5	--
	U801 (on main board)	48.4	--
	PCB near U401 body	52.6	--
	PCB near U402 body	49.3	--
	Plastic enclosure inside	33.9	--
	Plastic enclosure outside	28.6	--
	Metal	34.4	--
	Panel surface	35.8	--

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Clause	Requirement + Test	Result - Remark	Verdict
Ambient	25.0	--	--
<b>Model **2381** with main board 715G7581, panel M230HGE-L** (CHIMEI INNOLUX)</b>			
DC inlet body CN701 (on main board)	35.9	--	55.1
PCB near U701 body (on main board)	43.8	--	90.1
PCB near L701 (on main board)	44.3	--	90.1
PCB near C801 (on main board)	43.5	--	90.1
PCB near U801 (on main board)	49.7	--	90.1
PCB near U401 (on main board)	51.7	--	90.1
PCB near U402 (on main board)	47.9	--	90.1
PCB near L801 body (on main board)	47.3	--	90.1
Plastic enclosure inside	32.8	--	--
Plastic enclosure outside	28.9	--	80.1
Metal	35.6	--	55.1
panel	36.7	--	80.1
Ambient	25.1	--	--
<b>Model **2381** with main board 715G7580, panel M230HGE-L** (CHIMEI INNOLUX)</b>			
DC Inlet body CN701	36.8	--	54.3
PCB near U701 (on main board)	44.8	--	89.3
C801body (on main board)	43.8	--	89.3
L701 body (on main board)	45.1	--	89.3
L801 body (on main board)	48.4	--	89.3
U801 (on main board)	49.3	--	89.3
PCB near U401 body	53.5	--	89.3
PCB near U402 body	50.2	--	89.3
Plastic enclosure inside	34.8	--	--
Plastic enclosure outside	29.5	--	79.3
Metal	35.3	--	54.3
Panel surface	37.3	--	79.3
Ambient	24.3	--	--
<b>Model **2481** with main board 715G7581, panel LM238WF* (L&amp;T)</b>			
DC inlet body CN701 (on main board)	35.9	--	54.6
PCB near U701 body (on main board)	43.8	--	89.6
PCB near L701 (on main board)	44.3	--	89.6

IEC 60950-1							
Clause	Requirement + Test			Result - Remark			Verdict
PCB near C801 (on main board)	43.5			--			89.6
PCB near U801 (on main board)	49.7			--			89.6
PCB near U401 (on main board)	51.7			--			89.6
PCB near U402 (on main board)	47.9			--			89.6
PCB near L801 body (on main board)	47.3			--			89.6
Plastic enclosure inside	33.7			--			--
Plastic enclosure outside	29.1			--			79.6
Metal	35.6			--			54.6
panel	36.7			--			79.6
Ambient	24.6			--			--
<b>Model **2481***** with main board 715G7580, panel LM238WF* (L&amp;T)</b>							
DC Inlet body CN701	36.5			--			54.8
PCB near U701 (on main board)	44.1			--			89.8
C801body (on main board)	43.3			--			89.8
L701 body (on main board)	44.3			--			89.8
L801 body (on main board)	47.6			--			89.8
U801 (on main board)	48.5			--			89.8
PCB near U401 body	52.7			--			89.8
PCB near U402 body	49.4			--			89.8
Plastic enclosure inside	34.3			--			--
Plastic enclosure outside	29.7			--			79.8
Metal	34.5			--			54.8
Panel surface	36.5			--			79.8
Ambient	24.8			--			--
<b>Supplementary information:</b>							
1. The temperatures were measured under the worse case normal mode defined in 1.2.2.1 and as described in sub-clause 1.6.2 at voltages as described above.							
2. With a specified ambient temperature of 40°C, and the minimum ambient temperature during test Tam, Temperature is calculated as follows:							
- $T_{max} = T_{max} \text{ of component} - 40 + T_{amb}$ .							
Temperature T of winding:	t <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	t <sub>2</sub> (°C)	R <sub>2</sub> (Ω)	T (°C)	Allowed T <sub>max</sub> (°C)	Insulation class
<b>Supplementary information:</b>							

IEC 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict
<b>5.3</b>	<b>TABLE: Fault condition tests</b>					<b>P</b>
	Ambient temperature (°C) .....				See below	—
	Power source for EUT: Manufacturer, model/type, output rating .....					—
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
Tested on main board: 715G7581						
D801	s-c	264	5min	--	--	Unit shut down, no hazard.
L701	s-c	264	5min	--	--	Unit shut down, no hazard.
C703	s-c	264	5min	--	--	Unit shut down, no hazard.
C801	s-c	264	5min	--	--	Unit shut down, no hazard.
U701 Pin 2-6	s-c	264	5min	--	--	Unit shut down, no hazard.
C809	s-c	264	5min	--	--	Unit shut down, no hazard.
Tested on main board: 715G7580						
D801	s-c	264	5min	--	--	Unit shut down, no hazard.
L701	s-c	264	5min	--	--	Unit shut down, no hazard.
C703	s-c	264	5min	--	--	Unit shut down, no hazard.
C801	s-c	264	5min	--	--	Unit shut down, no hazard.
U701 Pin 2-6	s-c	264	5min	--	--	Unit shut down, no hazard.
C809	s-c	264	5min	--	--	Unit shut down, no hazard.
<b>Supplementary information:</b>						
1. In fault column, where s-c=short-circuited, o-c=open-circuited, o-l = overload.						



Product: LCD MONITOR

Type Designation: 215LM000\*\*, \*2279\*\*\*\*, **\*\*2281\*\*\*\***, 230LM000\*\*, \*2379\*\*\*\*, **\*\*2381\*\*\*\***,  
**238LM000\*\***, \*2380\*\*\*\*, **\*\*2481\*\*\*\*** (\* can be 0-9, A-Z, a-z, -, \, /, + or blank,  
represent different enclosure color and sales regions for marketing purpose only, no  
technical difference.)



Photo 1: Front view of model **\*\*2281\*\*\*\***



Photo 2: Rear view of model **\*\*2281\*\*\*\***

Product: LCD MONITOR

Type Designation: 215LM000\*\*, \*2279\*\*\*\*, **\*\*2281\*\*\*\***, 230LM000\*\*, \*2379\*\*\*\*, **\*\*2381\*\*\*\***,  
**238LM000\*\***, \*2380\*\*\*\*, **\*\*2481\*\*\*\*** (\* can be 0-9, A-Z, a-z, -, \, /, + or blank,  
represent different enclosure color and sales regions for marketing purpose only, no  
technical difference.)



Photo 3: Top view of model **\*\*2281\*\*\*\***



Photo 4: Right side view of model **\*\*2281\*\*\*\***

Product: LCD MONITOR

Type Designation: 215LM000\*\*, \*2279\*\*\*\*, **\*\*2281\*\*\*\***, 230LM000\*\*, \*2379\*\*\*\*, **\*\*2381\*\*\*\***,  
**238LM000\*\***, \*2380\*\*\*\*, **\*\*2481\*\*\*\*** (\* can be 0-9, A-Z, a-z, -, \, /, + or blank,  
represent different enclosure color and sales regions for marketing purpose only, no  
technical difference.)



Photo 5: Left side view of model **\*\*2281\*\*\*\***



Photo 6: Base stand type B

Product: LCD MONITOR

Type Designation: 215LM000\*\*, \*2279\*\*\*\*, \*\*2281\*\*\*\*, 230LM000\*\*, \*2379\*\*\*\*, \*\*2381\*\*\*\*, 238LM000\*\*, \*2380\*\*\*\*, \*\*2481\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure color and sales regions for marketing purpose only, no technical difference.)



Photo 7: Base stand type B



Photo 8: Internal view

Product: LCD MONITOR

Type Designation: 215LM000\*\*, \*2279\*\*\*\*, \*\*2281\*\*\*\*, 230LM000\*\*, \*2379\*\*\*\*, \*\*2381\*\*\*\*, 238LM000\*\*, \*2380\*\*\*\*, \*\*2481\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure color and sales regions for marketing purpose only, no technical difference.)

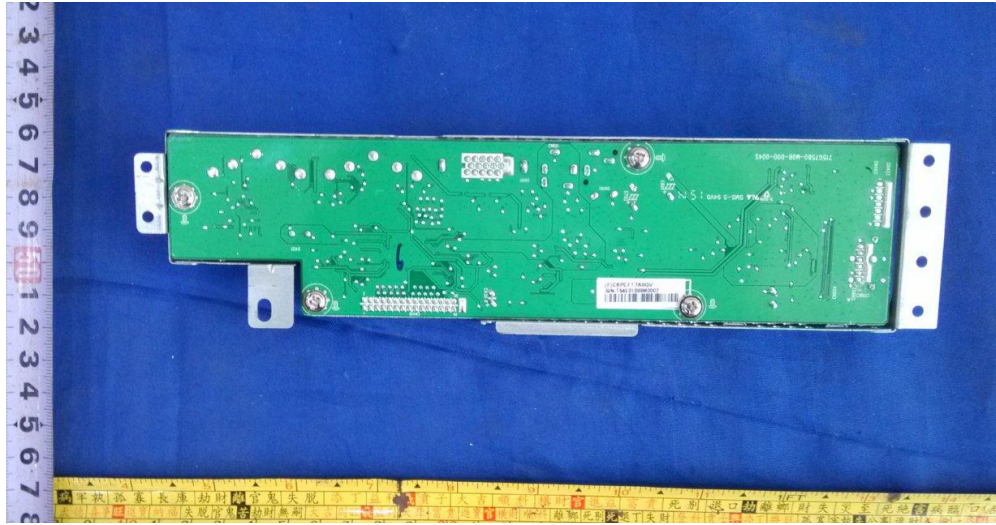


Photo 9: Internal view



Photo10: Main board 715G7580

Product: LCD MONITOR

Type Designation: 215LM000\*, \*2279\*\*\*\*, \*\*2281\*\*\*\*, 230LM000\*, \*2379\*\*\*\*, \*\*2381\*\*\*\*, 238LM000\*, \*2380\*\*\*\*, \*\*2481\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure color and sales regions for marketing purpose only, no technical difference.)

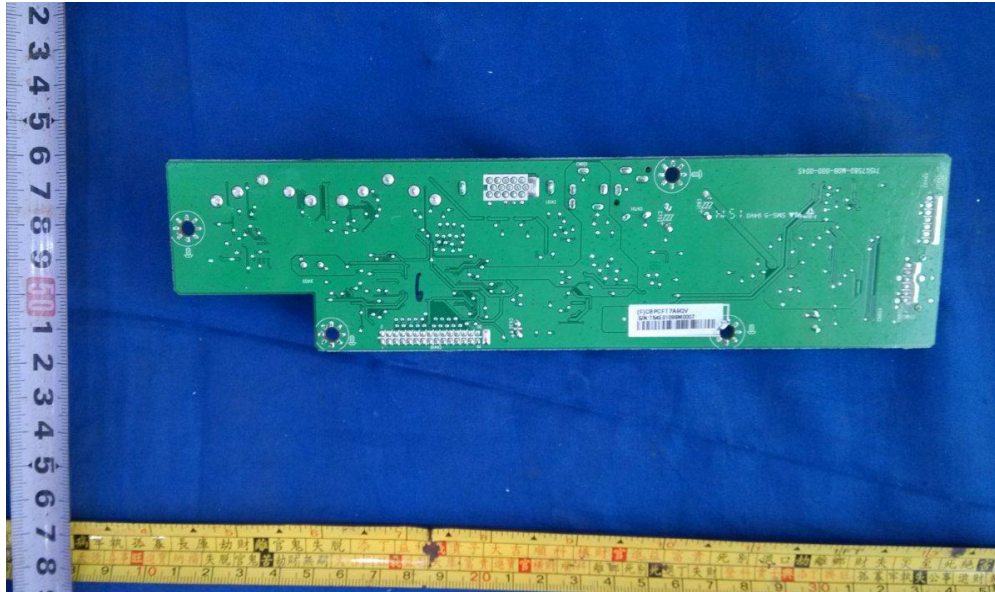


Photo 11: Main board 715G7580

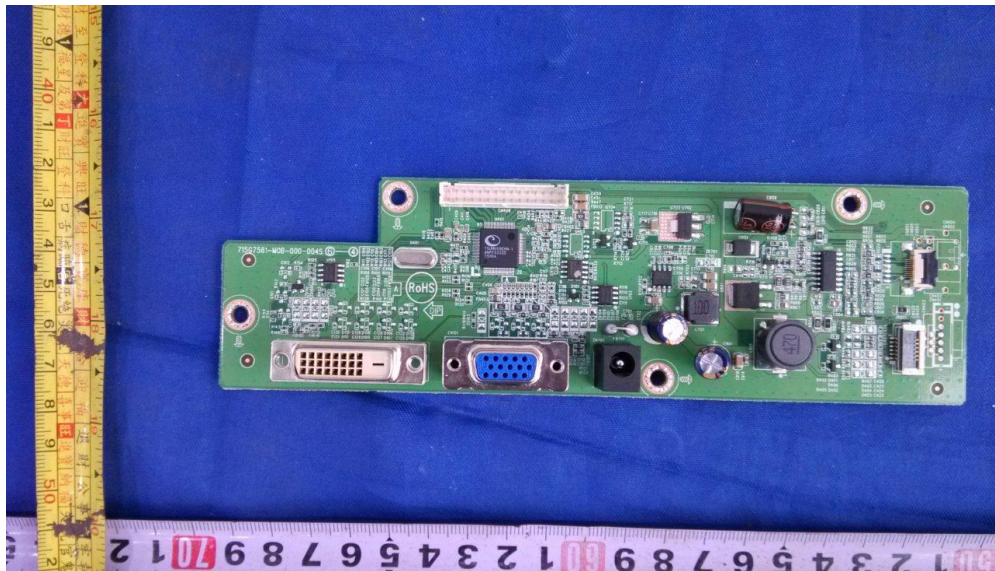


Photo 12: Main board 715G7581

Product: LCD MONITOR

Type Designation: 215LM000\*\*, \*2279\*\*\*\*\*, \*\*2281\*\*\*\*\*, 230LM000\*\*, \*2379\*\*\*\*\*, \*\*2381\*\*\*\*\*,  
238LM000\*\*, \*2380\*\*\*\*\*, \*\*2481\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank,  
represent different enclosure color and sales regions for marketing purpose only, no  
technical difference.)

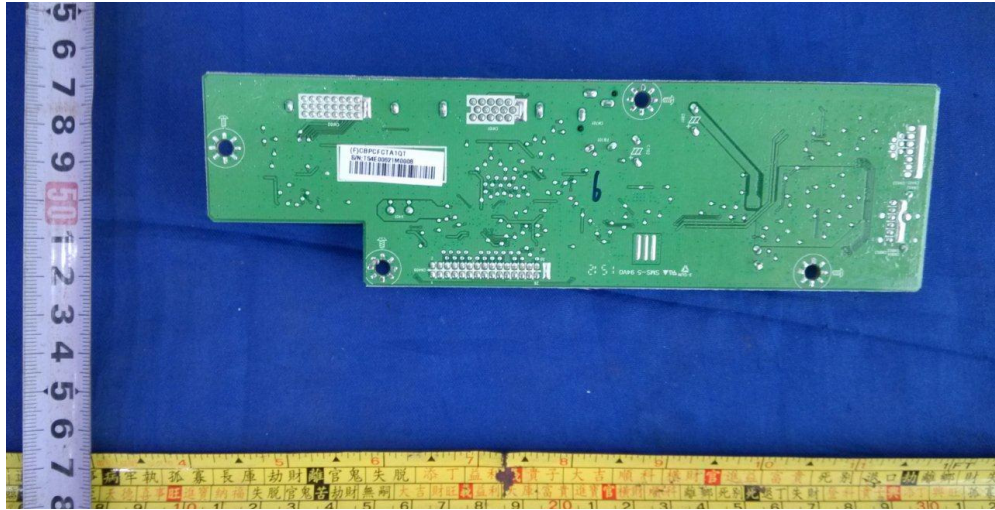


Photo 13: Main board 715G7581